

REMARKS

Reconsideration of the application identified in caption, pursuant to and consistent with 37 C.F.R. §1.111 and in light of the remarks which follow is respectfully requested.

In the Official Action, claims 25-36, 38 and 40-48 stand rejected under 35 U.S.C. §103(a) as being obvious over French Patent Document No. FR 2 833 603 (*FR '603*) in view of U.S. Patent No. 6,319,575 (*Takashima et al*). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Independent claim 25 recites a thermoplastic composition comprising a mixture of a polyamide and/or polyester matrix with at least: (i) a first additive of formula $R-Z_u$, and (ii) a second additive (B) obtained by a reaction between at least: a) one monofunctional compound of formula (III), b) one branching compound of formula (IV), c) optionally, one multifunctional compound of formula (I), and d) optionally, one bifunctional monomer of formula (II) or a corresponding cyclic form.

FR '603 relates to a thermoplastic polymeric composition including a hyperbranched polyamide, and articles formed from such composition. See page 1 of machine translation.

FR '603 does not disclose or suggest each feature recited in independent claim 25. For example, *FR '603* does not disclose or suggest a thermoplastic composition comprising a mixture of a polyamide and/or polyester matrix with at least: (i) a first additive of formula $R-Z_u$, as recited in claim 25. *FR '603* has no disclosure or suggestion of the recited first additive. Such deficiency of *FR '603* has been acknowledged by the Patent Office at page 3, last line, of the Official Action.

The Patent Office has relied on *Takashima et al* for disclosing the use of a tricarboxylic acid compound including trimesic acid. The Patent Office has noted that *Takashima et al* teaches that tricarboxylic acid provides improved transparency and whitening resistance at moisture absorbing of films without deteriorating their gas barrier properties. See Official Action at page 4. For at least the following reasons, Applicants respectfully but strenuously submit that the combined use of the recited first and second additives would not have been obvious in view of the teachings of *FR '603* and *Takashima et al*.

Applicants have discovered that by employing both a first additive of formula $R-Z_u$, and a second additive (B) obtained by a reaction between at least a) one monofunctional compound of formula (III) and b) one branching compound of formula (IV), in the formation of a thermoplastic composition, **surprising** and **unexpected** results can be attained in the form of good fluidity during processing, mechanical strength, and surface appearance characteristics. Exemplary aspects of such characteristics are discussed at page 1, line 25 to page 2, line 16 of the instant specification.

The Examiner's attention is directed to the examples discussed at pages 21-24 of the instant specification. Table 2 at pages 22-23 of the instant specification sets forth the components employed in the preparation of various comparative and inventive examples. Specifically, comparative examples C5 and C6 employed a hyperbranched polyamide, i.e., an example of the recited second additive. Comparative examples C5 and C6 are at least as close to the claimed thermoplastic composition as *FR '603* in view of the fact that such comparative examples employed an exemplary second additive (hyperbranched polyamide) but not the

recited first additive. Comparative examples C2, C3 and C4 employed additives T2 (isophthalic acid) and/or T4 (2,2,6,6-tetrakis(β -carboxyethyl)cyclohexanone). See page 20, lines 18-20. Comparative examples C2, C3 and C4 are at least as close to the claimed thermoplastic composition as *Takashima et al* in view of the fact that such comparative examples employed an exemplary first additive (T1 and/or T2) but not the recited second additive. Inventive examples 7 and 8 employed both hyperbranched polyamide (i.e., an exemplary second additive) and an exemplary first additive.

As can be seen from the experimental results, Comparative examples C5 and C6 exhibited surface appearance characteristics which were either inferior or markedly inferior to that of the control. Moreover, such surface appearance characteristics were inferior to those of the inventive examples. See Table 2 and page 24, lines 14-28. In addition, Comparative examples C2, C3 and C4 exhibited impact resistance characteristics which were substantially inferior to that of the inventive examples. See Table 2. In view of the inferior surface characteristics obtained from employing an exemplary second additive without an exemplary first additive, and the inferior mechanical strength characteristics obtained from employing an exemplary first additive without an exemplary second additive, the ordinarily skilled artisan would not have expected that the combined use of such first and second additives would result in good mechanical strength characteristics and good surface appearance characteristics, while maintaining good fluidity during processing characteristics, as recognized by Applicants. It would not have been obvious to combine such first and second additives because the ordinarily skilled artisan would (at best) have recognized that the individual use of each of the first and

second additives leads to technical problems and/or inferior performance. Moreover, as noted above, the improved results attained in the inventive examples are **surprising and unexpected** in view of the mechanical and surface appearance characteristics exhibited by the comparative compositions.

For at least the above reasons, it is apparent that the claims are non-obvious over the applied art. Accordingly, withdrawal of the above §103(a) rejection is respectfully requested.

The dependent claims are allowable at least by virtue of their direct or indirect dependence from independent claim 25. Thus, a detailed discussion of the additional distinguishing features recited in the dependent claims is not set forth at this time.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: April 8, 2010

By:



Roger H. Lee

Registration No. 46317

Customer No. 21839
703 836 6620